

Amendments to the Specification:

On page 1, line 3, please insert the following heading between the title of the invention and the first paragraph:

"FIELD OF THE INVENTION"

On page 1, line 9, please insert the following heading between the first and second paragraphs:

"BACKGROUND OF THE INVENTION"

On page 2, line 15, please insert the following heading:

"SUMMARY OF THE INVENTION"

On page 2, line 15, after the heading "SUMMARY OF THE INVENTION", please insert the following text:

In an embodiment, the present invention provides for a star wheel for a conveyor system, the star wheel comprising a first and second segment, each segment having a perimeter adapted to receive articles to be conveyed, the segments being rotatable about a common axis at different speeds and a control means for controlling rotation of the segments so as to avoid clashing between one segment and the other segment or any articles conveyed thereby.

The control means comprises a first shaft for rotating the first segment about the common axis, a second shaft for rotating the second segment about the common axis, and a resilient means for resiliently connecting the first shaft to the second shaft. The control means comprises a connect means for connecting the first shaft to a first drive for rotating the first and second shafts about the common axis, and a select means for selectively connecting the second shaft to a second drive for rotating the second shaft about the common axis at a different speed from the first shaft. The control means comprises a clutch arrangement for selectively connecting the second shaft to, and disconnecting the second shaft from, the second drive.

The clutch arrangement is arranged to connect the second shaft to the second drive upon deceleration of the first shaft. The clutch arrangement is arranged to connect the second shaft to the second drive when the second segment is at a first predetermined angular

position. To prevent clashing, the clutch arrangement is arranged to disconnect the second shaft from the second drive following rotation of the second segment to a second predetermined angular position relative to the first segment.

The resilient means is arranged to return the second segment from the second angular position to the first-mentioned angular position upon disconnection of the second shaft from the second drive.

The clutch arrangement comprises a solenoid clutch actuatable to selectively engage a disc rotated by the second drive. The resilient means comprises a torsion spring connecting the first shaft to the second shaft.

At least part of the first segment is axially spaced from the second segment along the common axis. The first and second segments are of different size. The segments define an annular wheel in plan view. Each segment has a plurality of article-engaging elements spaced about the periphery thereof. Each element comprises a recess for receiving an article to be conveyed. The segments may have different numbers of elements.

The control means comprises a first servo arrangement for selectively connecting the first segment to one of a first drive and a second drive to rotate the segment at a first speed, and a second servo arrangement for selectively connecting the second segment to the other of the first drive and the second drive to rotate the second segment at a second speed different from the first speed. The first and second servo arrangements are arranged to synchronously change the drive to which the segments are connected to prevent said clashing.

The present invention provides for a star wheel for a conveyor system, the star wheel comprising first and second segments each having a perimeter adapted to receive articles to be conveyed, a first shaft for rotating the first segment about an axis, a second shaft for rotating the second segment about the axis, a resilient means for resiliently connecting the first shaft to the second shaft, a connect means for connecting the first shaft to a first drive for rotating the first and second shafts together about the axis, and a select means for selectively connecting the second shaft to a second drive for rotating the second shaft about the axis at a different speed from the first shaft.

In another embodiment, the present invention provides for a star wheel for a conveyor system, the star wheel comprising a first and second segment that are rotatable about a common axis, each segment having a perimeter adapted to receive articles to be conveyed, a first servo arrangement for connecting the first segment to one of a first and a second drive, and a second servo arrangement for connecting the second segment to the other of the first and second drive, wherein the first and second servo arrangements are arranged to synchronously change the drive to which each segment is connected.

In another embodiment, the present invention provides for conveying articles from a first station to a second station, the apparatus comprising a star wheel, a first conveyor for conveying articles from the first station to the star wheel, a first drive for driving the first conveyor, a second conveyor for conveying articles from the star wheel to the second station, and a second drive for driving the second conveyor.

The first and second drives are arranged to drive the conveyors at the same speed. The first and second drives are arranged to drive the conveyors at different speeds.

In an embodiment, the apparatus comprises a second star wheel for transferring articles from the first conveyor to the first star wheel, and a third star wheel for transferring articles from the first star wheel to the second conveyor. The first drive is arranged to rotate the second star wheel and the second drive is arranged to rotate the third star wheel. The first star wheel is smaller than the second and third star wheels. The first star wheel has a smaller number of article-engaging elements than either the second or the third star wheel. The third star wheel has a smaller number of article-engaging elements than the second star wheel.

On page 6, line 21, please insert the following heading:

“BRIEF DESCRIPTION OF THE DRAWINGS”

On page 7, line 12, please insert the following heading:

“DETAILED DESCRIPTION OF THE INVENTION”

On page 15, line 26, please insert the following text:

While the present invention has been particularly shown and described with reference to exemplary embodiments thereof, it will be understood by those of ordinary skill in the art that various changes in form and details may be made therein without departing from the spirit and scope of the present invention as defined by the following claims.

On page 16, line 2, between the "CLAIMS" heading and claim 1, please insert the following:

"I/We claim:"